

Amendments to the Claims

What is claimed is:

1. A vaccine comprising a non-neuroinvasive rabies virus wherein a glycoprotein gene of said non-neuroinvasive rabies virus is replaced with a glycoprotein gene of a neuroinvasive rabies virus to produce an attenuated recombinant rabies virus for vaccination.
2. The vaccine of Claim 1 wherein said vaccination comprises an oral vaccination.
3. The vaccine of Claim 1 wherein said attenuated recombinant rabies virus slows down an uptake of a rabies virus into a cell.
4. The vaccine of Claim 3 wherein said cell is a neuron.
5. The vaccine of Claim 1 wherein said glycoprotein gene of a neuroinvasive rabies virus comprises a glycoprotein gene encoding a cytoplasmic tail from a heterologous glycoprotein gene.
6. Cancelled
7. (currently amended) A vaccine comprising a rabies virus wherein a cytochrome c gene is inserted into said rabies virus such that a ~~pre-apoptotic~~ cytochrome c protein is expressed from said ~~pre-apoptotic~~ cytochrome c gene to produce a recombinant rabies virus for vaccination.
8. Cancelled
9. The vaccine of Claim 7 wherein said vaccination is an oral vaccination.
10. (currently amended) The vaccine of Claim 7 wherein said ~~apoptotic~~ cytochrome c protein induces an acceleration of apoptosis.

11. The vaccine of Claim 10 wherein said acceleration of apoptosis enhances an immune response against said rabies virus.

12. The vaccine of Claim 7 wherein said recombinant rabies virus vaccine attenuates the pathogenicity of a rabies virus.

13. (currently amended) A vaccine comprising a rabies virus wherein a cytochrome c gene is inserted into said rabies virus such that a ~~pro-apoptotic~~ cytochrome c protein is expressed from said ~~pro-apoptotic~~ cytochrome c gene and further wherein a glycoprotein gene of said rabies virus is replaced with a glycoprotein gene of a neuroinvasive rabies virus to produce an attenuated recombinant rabies virus for vaccination.

14. Cancelled

15. The vaccine of Claim 13 wherein said vaccination is an oral vaccination.

16. The vaccine of Claim 13 wherein said glycoprotein gene of a neuroinvasive rabies virus comprises a glycoprotein gene encoding a cytoplasmic tail from a heterologous glycoprotein gene.

17. The vaccine of Claim 13 wherein said glycoprotein gene of a neuroinvasive rabies virus comprises a change in an amino acid.

18. The vaccine of Claim 13 wherein said pro-apoptotic protein induces an acceleration of apoptosis.

19. The vaccine of Claim 18 wherein said acceleration of apoptosis enhances an immune response against said rabies virus.